



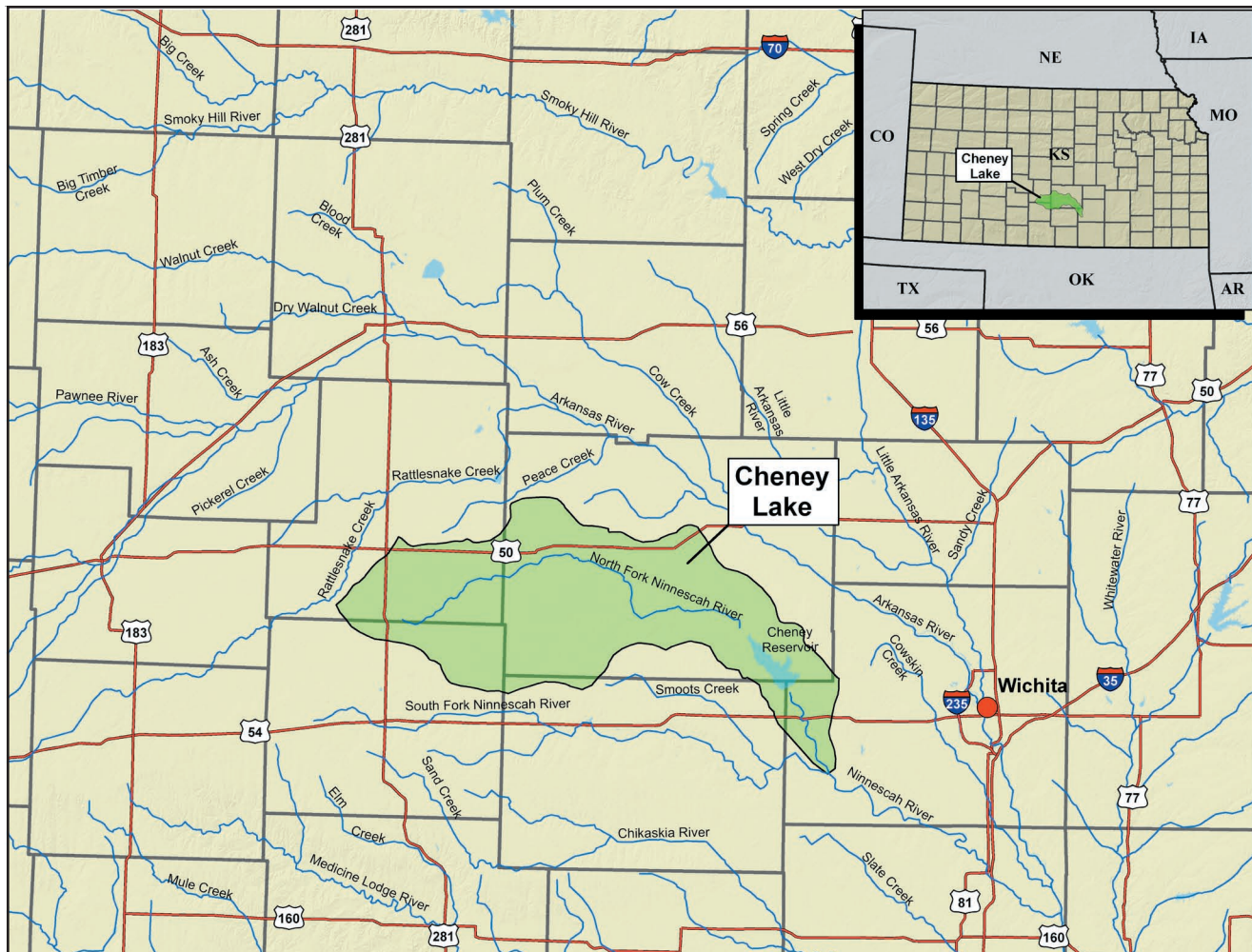
United States Department of Agriculture

Conservation Effects Assessment Project (CEAP)

Watershed Fact Sheet

Cheney Lake Watershed, Kansas: 2004-2006

An NRCS* Special Emphasis Watershed, one of 24 CEAP watershed projects.



CEAP Assessment

Evaluate downstream effects of current Conservation Reserve Program and Environmental Quality Incentives Program practices.

- Cheney reservoir is on high-priority impaired water body under the Clean Water Act.

Issues: Phosphates and sediment pollute the reservoir

Watershed Description

- Drains into Cheney reservoir, which provides Wichita with 70% of its daily water supply for more than 400,000 residents.
- 630,000 acres
- 58% cropland and 25% rangeland

**Natural Resources Conservation Service*



Containment of polluted runoff water for confined animal feeding operations.



Containment of solid waste in a concrete structure and containment of liquid waste can significantly improve water quality.



A solar pump, well and tank provide alternate water to livestock rather than a stream.

Approach

Water Sampling: Sediment, nutrients

Watershed Models: AnnAGNPS (Annualized Agricultural Non-Point Source)

Water Quality Monitoring: Extensive U.S. Geological Survey project (1996-2000) at five locations will be used to calibrate and validate AnnAGNPS.

Communicating Results

2004 annual progress report (published): focused on impacts of water, sediment, and agricultural chemicals with and without Conservation Reserve Program and Environmental Quality Incentives Program practices. 2005 progress report will examine effects of ephemeral gully development and atrazine management. 2006 progress report will study effects of livestock feedlots and improved management of center pivot irrigation.

Collaborators

- U.S. Department of Agriculture
- U.S. Geological Survey
- U.S. Environmental Protection Agency
- U.S. Bureau of Reclamation
- County Conservation Districts for Reno, Stafford, Pratt, and Kingman
- Cheney Lake Watershed, Inc.
- City of Wichita
- Kansas Department of Health and Environment
- Kansas State University
- University of Kansas

Contacts

James Krueger, State CEAP Coordinator
(james.krueger@ks.usda.gov)

Lyle Frees (lyle.frees@ks.usda.gov)

Lisa J. French, Watershed Leader
(lisa.french@ks.nacdnet.net)

NRCS State Conservationist

Harold L. Klaege

The U.S. Department of Agriculture is an equal opportunity provider and employer.

July 2005

<http://www.nrcs.usda.gov/technical/nri/ceap/>